4.11   IMPACTS ON SOCIOECONOMICS

Section 3.11 presents information about the existing social and economic characteristics of the three-county region. This section describes the impacts of the Proposed Action and its alternatives on economic output, employment, population, housing, tourism, and local government fiscal conditions. A description of general impacts typically associated with casino gaming and population growth is also presented. The primary ROI for this analysis is the three-county region, but the cities of Biloxi and Gulfport are also examined in detail because of the concentration of Mississippi's Gulf Coast gaming industry within these cities.

4.11.1 Nature of the Casino Industry and Growth

The casino gaming industry has substantial effects on the local and regional economy. These effects occur in two phases – during construction of the casino facilities and during the operation of the casino facilities. The development of a casino facility requires substantial initial capital investment in the form of buildings, equipment, other land or water-based attractions, and worker skills. For example, construction of the Beau Rivage casino in the city of Biloxi required an investment of approximately $680 million. Besides the large investment required for new projects, the gaming industry continually supplements the original capital investment with improvements and updates (Arthur Andersen, 1997). To date, total direct casino investment in the three-county region has been approximately $1.5 billion (Mississippi Gaming Commission, 1999).

Once in operation, casinos generate revenue from a variety of sources. Direct revenues come from gaming, hotel rooms, food and beverages, merchandise, and other attractions. In turn, these revenues are used to provide payments to employees, suppliers, service providers (e.g., advertising, insurance, and utilities), and local, state, and federal government authorities (in gaming taxes or fees). The operation of gaming facilities is labor intensive, generating a diverse and large amount of direct and indirect employment. Payroll expenses, which include wages and benefits, and payroll taxes, are higher in the casino gaming industry than in other industries; 25 percent of casino revenue is spent on salaries and wages (excluding benefits), compared to 15 percent in the retail industry (Arthur Andersen, 1996). More wages generally translate into more purchasing of goods and services in the economy. Currently, casinos employ over 17,000 people in the three-county ROI, 11 percent of total employment.

A recent trend in the casino industry is to build increasingly larger developments in order to attract customers and remain competitive in the industry. Large-scale developments require a large workforce and supporting industries. The existing labor pool of a region may be inadequate for a development; therefore, workers must be attracted to the region for employment purposes. Workers who move to the region will increase population, require housing, and use social services. Casino developments attract customers from within and outside a region, and these customers, in turn, require services. Social issues and consequences related to the casino industry and growth are discussed in Section 4.11.6.

1 *4.11.2 Methodology and Organization of this Analysis*
2
3 The economic effects of a project can be estimated using an input-output (I-O) model. An I-O
4 model assesses economic effects by tracing the input of construction and operational investments
5 (dollars and jobs) as they ripple or multiply throughout a regional economy. Data entered into an
6 I-O model include construction costs, types of units constructed, and total output (retail sales and
7 net spending). The economic effects associated with the construction and operation include
8 economic output, employment, and employee compensation.
9
10 **Economic output** refers to the value of goods or services produced. Examples of goods or
11 services include gaming activity, hotel services, retail activity, golfing, and marina slips.
12 **Employment** refers to the number of jobs created by the construction and operation of the
13 project. **Employee compensation** refers to the value of employee wages. Each of these
14 economic measures has direct, indirect, and induced effect components.
15
16 • **Direct effects** refer to the impacts that the construction and operation of the project have on
17   the region. These impacts include the cost of construction and the ongoing costs of
18   operations. During both phases, money is spent on wages and the purchase of goods and
19   services.
20
21 • **Indirect effects** refer to the impacts associated with the increased economic activity (i.e., the
22   construction and operation). For example, an increase in construction activity would likely
23   result in increased sales at nearby stores and restaurants in the form of purchases by
24   construction workers.
25
26 • **Induced effects** refer to the impacts associated with changes in household spending. For
27   example, employees added to the regional economy (i.e., those hired for the project or in
28   related businesses because of the increased economic activity) have new income to purchase
29   goods and services.
30
31 For this EIS, the Impact Analysis for Planning (IMPLAN) I-O model was used to assess the
32 effects of alternative casino developments on the three-county ROI. The IMPLAN model closely
33 follows the accounting conventions used in the *1980 Input-Output Study of the U.S. Economy* by
34 the U.S. Department of Commerce's Bureau of Economic Analysis. Summary results of the
35 IMPLAN model are presented in this section. Detailed results for individual economic sectors,
36 along with more information about the IMPLAN model, are provided in Appendix K.
37
38 Additional related socioeconomic effects were estimated or characterized using the results of the
39 I-O analysis. These additional effects included population growth, labor force requirements,
40 employment growth, housing requirements, tourism-related revenues, gaming tax revenues, and
41 population distribution. The key consideration influencing this aspect of the analysis was
42 whether or not employment estimates derived for the Proposed Action and its alternatives using
43 the I-O analysis would constitute net employment gains, or whether the proposed project would
44 be included within current economic trends, yielding no net gains in employment. After
45 consultation with casino industry economic researchers, it was determined that the indirect and

1   induced employment would have likely occurred with or without the Proposed Action or its
2   alternatives. Summary results of these additional calculations for the year 2010 are presented in
3   this section. Results for individual years between 2000 and 2010, along with additional
4   information about these calculations, can be found in Appendix K.
5
6   Finally, a growth allocation model was used in order to illustrate where additional projected
7   population growth may occur in the three-county ROI. The geographic unit of analysis for the
8   growth allocation model is the block group (defined by the U.S. Bureau of Census). Data for
9   individual block groups can be added together to produce information at the county and
10 watershed levels. The growth allocation model distributes projected population increases over a
11 specific time period (from 2000 to 2005 to 2010). The population is distributed among census
12 block groups until the block groups reach their population capacity. Constraints on a block
13 group's capacity include natural and cultural factors such as size, wetland areas, and designated
14 park areas. The Department of Marine Resources is currently using a very similar growth
15 allocation model to perform geographic analyses of projected population increases for planning
16 purposes. A detailed description of the growth allocation model is presented in Appendix K.
17
18 The I-O and related analyses mentioned above were completed for each of the proposed
19 alternatives. The analyses found that Alternatives 2, 3, 4, and 5 would have similar impacts on
20 the socioeconomic characteristics of the three-county ROI. The No-action Alternative
21 comparison follows the discussion of Alternative 3. The existing population, employment, and
22 household projections for the No-action Alternative were derived from the Mississippi Institute
23 of Higher Learning (IHL) and the U.S. Bureau of Census. All projections were summarized for
24 the three-county ROI.
25
26 Section 4.11.3 presents the summary results of the I-O model for each alternative. Section 4.11.4
27 presents the related effects on population, labor force, and households. Section 4.11.5 presents
28 an assessment of effects on housing. Sections 4.11.6, 4.11.7, and 4.11.8 present impacts on
29 selected social issues, tourism, and local fiscal environments, respectively.
30
31 *4.11.3 Construction and Operational Impacts on Economic Output, Employment, and*
32   *Employee Compensation*
33
34 Impacts of the proposed alternatives (Alternatives 2, 3, 4, 5 and the No-action Alternative) on
35 economic output, employment, and employee compensation are assessed in two categories:
36 impacts during the project construction phase, and impacts during operation of the casino.
37 During the construction phase, the primary or direct impacts would consist mainly of temporary
38 construction employment and the purchase of construction materials. Much of the temporary
39 employment and construction materials (e.g., concrete and steel) would likely come from the
40 three-county ROI. Other materials, such as gaming devices, would likely be manufactured
41 outside the region. Once the project is operational, the primary impacts would consist of retail
42 and services employment and the purchase of recreation and amusement services such as gaming,
43 hotel stays, and marina slips.
44

1 Tables 4.11-1 and 4.11-2 summarize the annual construction and operational impacts (direct,
2 indirect, and induced) on economic output, employment, and employee compensation for
3 Alternatives 2, 3, 4, and 5. Direct effects calculated by the applicant were used as input to the I-
4 O model to calculate the indirect and induced effects. A discussion of each alternative follows
5 the tables.
6
7 **Table 4.11-1**
8 **Annual Construction Impact – 2001 to 2005***
9

Construction Output	Direct Effects	Indirect Effects	Induced Effects
Total Regional Economic Output			
Alternative 2	$414,400,000	$97,675,350	$63,586,803
Alternative 3	$601,700,000	$139,961,882	$91,320,130
Alternative 4	$372,600,000	$87,073,676	$56,747,403
Alternative 5	$365,900,000	$85,354,639	$55,638,407
Total Regional Employment (Jobs)			
Alternative 2	6,641	1,617	1,094
Alternative 3	9,643	2,315	1,572
Alternative 4	5,972	1,441	977
Alternative 5	5,863	1,412	958
Total Regional Employee Compensation			
Alternative 2	$204,000,000	$32,826,451	$19,202,535
Alternative 3	$297,000,000	$47,011,282	$27,577,728
Alternative 4	$185,000,000	$29,253,487	$17,137,118
Alternative 5	$182,000,000	$28,674,139	$16,802,216

10 *The construction impact for Alternative 3 would occur over a 3-year period (2001 to 2003) versus a 5-
11 year period for Alternatives 2, 4, and 5.
12 Source: DMA and staff analysis, 1999.
13

Table 4.11-2

Annual Operations and Commercial Activity – 2006 to 2010*

Operational Output	Direct Effects	Indirect Effects	Induced Effects
Total Regional Economic Output			
Alternative 2	$1,600,000,000	$325,953,843	$273,408,707
Alternative 3	$983,000,000	$204,221,203	$169,015,991
Alternative 4	$1,300,000,000	$255,846,682	$214,122,546
Alternative 5	$1,300,000,000	$255,846,682	$214,122,546
Total Regional Employment (Jobs)			
Alternative 2	13,145	4,795	4,706
Alternative 3	13,225	3,018	2,909
Alternative 4	13,145	3,767	3,686
Alternative 5	13,145	3,767	3,686
Total Regional Employee Compensation			
Alternative 2	$273,000,000	$87,754,274	$82,597,262
Alternative 3	$275,000,000	$55,115,962	$51,060,401
Alternative 4	$273,000,000	$68,907,768	$64,686,904
Alternative 5	$273,000,000	$68,907,768	$64,686,904

*Operations and commercial activity for Alternative 3 would begin two years before (in 2004) the operations of Alternatives 2, 4, and 5 because of a shorter construction period.
Source: DMA and staff analysis, 1999.

4.11.3.1   Alternatives 2, 4, and 5

Construction Phase

The construction of Alternatives 2, 4, and 5 would occur over a 5-year period. The construction of Alternatives 2, 4, and 5 would have similar large positive effects on economic output, employment, and employee compensation in the three-county ROI. For each alternative, annual project construction costs (listed under "Total Regional Economic Output – Direct Effects" in Table 4.11-1) were modeled through the ROI's regional economic structure for the 5-year construction period. The direct impacts in yearly average construction expenditures of Alternatives 2, 4, and 5 would be $414 million, $373 million, and $366 million, respectively.

These direct impacts would, in turn, produce indirect and induced effects. The indirect effects would occur as industries throughout the region expand to meet the demands of the new construction project. The induced effects would occur as new employees added to the economy purchase goods and services. Generally, the larger the direct effect, the larger the indirect and induced effects. It should be noted that the current size of the region's economy would limit the indirect and induced impacts (DMA and staff analysis, 1999).

The projected additional employment and employee compensation resulting from construction of Alternatives 2, 3, and 5 are summarized in Table 4.11-1. Of the three alternatives, Alternative 2 would have the largest direct impact, with over 6,600 jobs and $204 million in wages. The direct impacts of Alternatives 4 and 5 would be slightly less, with approximately 5,900 jobs and over

1 $180 million in wages. The indirect and induced jobs would likely be in sectors of the economy
2 other than construction. Construction expenditures generate positive short-term effects, while
3 commercial spending for the operation and maintenance of the new casino facilities generate
4 positive long-term effects.
5
6 Operational Phase
7
8 The operation of Alternatives 2, 4, and 5 would have similar large positive effects on economic
9 output, employment, and employee compensation beginning in year 6 and continuing into the
10 future. Each of the alternatives would require 1 to 2 years before becoming fully operational.
11 Annual revenues would be generated from the gaming, retail, and recreation activities of the
12 project. For each alternative, annual expected revenues are shown in Table 4.11-2. The direct
13 impacts in annual revenues for Alternatives 2, 4, and 5 would be $1.6 billion, $1.3 billion, and
14 $1.3 billion, respectively.
15
16 Similar to the construction phase, the operational phase would produce indirect and induced
17 effects. The indirect impacts would occur as industries throughout the region expand to meet the
18 demands of operating and maintaining the casino facilities. Induced effects would occur as new
19 employees working in the casino and related businesses purchase goods and services.
20
21 The projected additional employment and employee compensation resulting from casino
22 operations is summarized in Table 4.11-2. Alternatives 2, 4, and 5 are projected to employ over
23 13,000 employees and provide over $273 million in wages. Output for specific aggregated
24 economic sectors is shown in Appendix K.
25
26 *4.11.3.2   Alternative 3*
27
28 Construction Phase
29
30 The construction of Alternative 3 would occur over a 3-year period. The construction of
31 Alternative 3 would have large positive effects on economic output, employment, and employee
32 compensation in the three-county ROI similar to those of Alternatives 2, 4, and 5. However, the
33 effects would occur sooner due to a shorter construction period. Annual project construction
34 costs (listed under "Total Regional Economic Output – Direct Effects" in Table 4.11-1) were
35 modeled through the ROI's regional economic structure for the 3-year construction period. The
36 direct impacts in yearly average construction expenditures of Alternative 3 would be $602
37 million. Averaged over 5 years, the direct impacts would be $361 million, less than for
38 Alternatives 2, 4, and 5.
39
40 The projected additional employment and employee compensation resulting from construction is
41 summarized in Table 4.11-1. Alternative 3 would have a direct impact of over 9,600 jobs and
42 $297 million in wages. Averaged over 5 years, the direct impacts of Alternative 3 would be the
43 smallest (5,785 jobs with $178 million in wages). As with the other alternatives, the indirect and
44 induced jobs would likely be in sectors of the economy other than construction. Construction

1   expenditures generate positive short-term effects, while the operational phase generates positive
2   long-term effects.
3
4   <u>Operational Phase</u>
5
6   The operation of Alternative 3 would have large positive effects on economic output,
7   employment, and employee compensation beginning in year 4 and continuing into the future.
8   Alternative 3 would require 1 to 2 years before becoming fully operational. Annual revenues
9   would be generated from the gaming, retail, and recreation activities of the project. Annual
10   expected revenues are shown in Table 4.11-2. The direct impact in annual revenues for
11   Alternative 3 would be $983 million. Averaged over 5 years, the direct impacts would be over
12    $1.3 billion, similar to those of Alternatives 4 and 5.
13
14   The projected additional employment and employee compensation resulting from casino
15   operations is summarized in Table 4.11-2. Alternative 3 is projected to employ over 13,000
16   employees with over $275 million in wages. Alternative 3 would have more total employees
17   than Alternatives 2, 4, and 5 because the dispersed nature of Sites A through F may require
18   duplication of some employee positions. Output for specific aggregated economic sectors is
19   shown in Appendix K.
20
21   *4.11.3.3   No-Action Alternative*
22
23   Under the No-action Alternative, the existing Broadwater site would continue to operate as it has
24   in the past, contributing a positive effect on economic output, employment, and employee
25   compensation in the regional economy. The existing Broadwater site has about 1,000 employees.
26   Although new construction (for maintenance or expansion) at the existing Broadwater site is
27   possible, the magnitude of the project and subsequent impacts would be less than the impacts
28   associated with the construction and operation of Alternatives 2, 3, 4, or 5.
29
30   ***4.11.4 Impacts on Population, Labor Force, Employment, and Households***
31
32   Impacts on population, labor force, employment, and households were characterized or estimated
33   using job projections from the I-O analysis above, population projections from IHL, and the
34   population growth allocation model. Due to the current low unemployment rate in the three-
35   county region (under 4 percent), job seekers would be attracted to the region. Some workers
36   would probably leave current jobs for the new jobs. The labor force, then, is the pool of eligible
37   workers, including both employed and unemployed workers. New workers who move to the
38   region would increase the population base and increase demand for housing (homes and
39   apartments). It should be noted that some potential workers may already live in the region or
40   commute from outside the region.
41
42   First, a baseline condition was established using existing population projections from IHL. The
43   baseline condition functions as the No-Action Alternative. The population projections were
44   calculated as linear or straight-line projections, which increase at a constant increment. Labor
45   force, employment, and households are population-related subsets. These subsets are calculated

1   as ratios to population, based on the latest regional information and assumed to continue into the
2   future. The baseline condition reflects current growth trends in the three-county ROI and does
3   not include impacts associated with Alternatives 2, 3, 4, or 5.
4

5   The percentage of forecasted new employees, which includes direct, indirect, and induced
6   employment (see Appendix K) was used to determine the level of economic activity without the
7   project (the baseline) and with the project. It is unlikely that the Proposed Action or its
8   alternatives would account for all economic activity (or 100 percent of forecasted new
9   employees) in the three-county ROI. Therefore, it was assumed that the direct jobs were
10   unaccounted for in the baseline forecast and represent a net gain in employment, while indirect
11   and induced jobs were accounted for in the baseline forecast and do not represent new
12   employment.
13

14   The impacts on labor force, employment, population, and households for Alternatives 2, 3, 4, 5,
15   and the No-action Alternative (the baseline) in the year 2010 are summarized in Table 4.11-3.
16   Results for individual years between 2000 and 2010 and a detailed description of calculations can
17   be found in Appendix K. A discussion of the alternatives follows.
18

19
20
21
22

Table 4.11-3
Total Population, Labor Force, Employment, and Household Projections
for the Proposed Alternatives in the Year 2010

	Population Forecast	Labor Force Requirement	Employment Forecast	Number of Households
Alternative 2	444,057	223,805	207,375	159,160
Alternative 3	444,228	223,891	207,455	159,222
Alternative 4	444,057	223,805	207,375	159,160
Alternative 5	444,057	223,805	207,375	159,160
No-Action Alternative/ "Baseline"	415,909	209,618	194,230	149,071
Difference Due to Alternatives 2, 3, 4, or 5	28,000	14,000	13,000	10,000
% Increase Due to Alternatives 2, 3, 4, or 5	7.0%	7.0%	7.0%	7.0%

23   Source: DMA and staff analysis, 1999.
24

25   *4.11.4.1   Alternatives 2, 4, and 5*
26

27   The construction and operation of Alternatives 2, 4, and 5 would produce large increases in
28   population, labor force, employment, and households in the three-county ROI. During the
29   construction phase, impacts on population, labor force, employment, and households vary for
30   Alternatives 2, 4, and 5, but equalize beginning with the operations phase because the number of
31   employees would be the same (see Appendix K). By 2010, population is projected to increase by

1 over 46,000 people, from 369,447 to 415,909, a 12 percent increase. Additional population
2 related to the construction and operation of Alternatives 2, 4, or 5 would add over 28,000 people,
3 from 415,909 to 444,057, a 7 percent increase. Labor force, employment, and households are
4 projected to increase by 7 percent as well, reflecting the relationship to population (see Table
5 4.11-3).
6
7 A growth allocation model was used to predict the distribution of additional population growth
8 related to the construction and operation of Alternatives 2, 4, and 5. The population was
9 distributed among census block groups at 3 persons per acre until the block groups reached their
10 population capacity. Constraints on a block group's capacity include natural and cultural factors
11 such as size, wetland areas, and designated park areas. Data for individual block groups were
12 added together to produce information at the county and watershed levels. Since the additional
13 population growth did not vary greatly among the alternatives, the additional population growth
14 for Alternative 2 was used as the added increment of population to be distributed among census
15 block groups in the three-county ROI.
16
17 By 2010, the population growth allocation model shows that the added increment of population
18 resulting from the Proposed Action or its alternatives absorbs only 2 to 3 percent of each of the
19 three counties' total population capacity. Several conclusions can be drawn from the results of
20 the population growth allocation model. First, the three-county region appears to have sufficient
21 developable areas (i.e., areas that are not environmentally sensitive) to support the projected
22 population growth added by the alternatives by the year 2010. Second, current development
23 constraints (i.e., environmentally sensitive areas) are not severe enough to force development
24 into new areas at a greater rate. Thus, future growth is possible without undue impact on
25 environmentally sensitive areas, making sustainable development levels possible into the future
26 (CEI and staff analysis, 1999). The growth allocation model results are presented in Appendix
27 K.
28
29 *4.11.4.2   Alternative 3*
30
31 The construction and operation of Alternative 3 would produce large increases in population,
32 labor force, employment, and households in the three-county ROI. Impacts would occur sooner
33 due to the shorter construction schedule for Alternative 3. Although Alternative 3 would have
34 the greatest impact of all the alternatives, the impact does not differ greatly among all alternatives
35 by the year 2010. Results for individual years between 2000 and 2010 can be found in Appendix
36 K. The results and conclusions for the distribution of population growth in the three-county ROI
37 using the population growth allocation model would be similar to those associated with
38 Alternatives 2, 4, and 5, discussed above.
39
40 *4.11.4.3   No-Action Alternative*
41
42 Between 2000 and 2010, the baseline population is projected to increase by over 46,000 people
43 in the three-county region, resulting in a total population of 415,909, a 13 percent increase.
44 Under the No-action Alternative, the possible expansion of the existing Broadwater site would
45 affect population, labor force, employment, and households in the three-county ROI. However,

1 the magnitude of the project and subsequent impacts would be less than the impacts of
2 Alternatives 2, 3, 4, or 5.
3
4 By 2000, the population growth allocation model (using baseline population projections) shows
5 some watersheds in populated areas reaching their total capacity (when defined as 3 persons per
6 acre) without the Proposed Action or its alternatives. Examples include Edwards Bayou and
7 Waveland in Hancock County (see Appendix K).
8
9 ### 4.11.5 Impacts on Housing
10
11 The Proposed Action and its alternatives would not include the construction of any on-site
12 residential units and, therefore, would not contribute directly to the existing housing stock.
13 However, construction and operation of the Proposed Action and its alternatives would be
14 expected to create additional jobs in the three-county region and, as a result, increase the demand
15 for housing and spur residential development in the area. The primary housing-related effect of
16 the Proposed Action and its alternatives would be an increased demand for housing and increased
17 need for affordable housing opportunities.
18
19 *4.11.5.1   Alternatives 2, 3, 4, and 5*
20
21 Alternatives 2, 3, 4, and 5 include similar employment projections and, as a result, similar
22 population and housing projections. Therefore, these four alternatives are discussed together in
23 terms of their potential impact on housing.
24
25 Based on the employment projections for Alternatives 2, 3, 4, and 5, the number of new residents
26 to the area was estimated and, from that, the number of new dwelling units was projected. These
27 estimates and projections are detailed in Appendix K. It is anticipated that impacts to the
28 housing market from these alternatives would be fully realized around the year 2006; therefore,
29 the following numbers are based on projected housing needs for 2006. It is estimated that 10,800
30 new dwelling units would be needed to support the increased population above the baseline
31 projection as a result of Alternatives 2, 3, 4, and 5. Thirty-two percent (3,456) of the housing
32 would be needed as rental units and 68 percent (7,344) would be needed for owner-occupied
33 units. Approximately 40 percent (4,320) of the new households would qualify for affordable
34 housing.
35
36 The estimate of housing needs and the distribution of renter- versus owner-occupied units is
37 based upon the distribution in the three-county region reported in the 1990 census. The renter-
38 versus owner-occupied distribution was projected to be similar to the 1990 distribution when the
39 housing impact stabilizes in 2006; however, a higher percentage of households would likely rent
40 during their first year in the area, because it is common for newcomers to rent in a community
41 prior to purchasing a home. The number qualifying for affordable housing is based upon the
42 income distribution in the three-county region reported in the 1990 census. Although this
43 information is 10 years old, it is the best available data at this time and provides an adequate
44 basis for a probable projection.
45

1 The increase in housing demand of 10,800 units would be distributed over the six years between
2 2001 and 2006. The annual increase in housing demand above the baseline for each alternative is
3 identified in Table 4.11-4. This table identifies the year and extent to which the greatest pressure
4 would be placed on the housing industry, creating demands such as a need for businesses to
5 design and build housing and a need for local government to review, permit, and approve
6 construction.
7
8 **Table 4.11-4**
9 **Annual Increase In Housing Demand Above Baseline**
10

	2001	2002	2003	2004	2005	2006	TOTAL
Alternative 2	3,627	1,827	3,654	(92)	1,843	(64)	10,795
Alternative 3	5,939	5,939	(5,939)	(2,355)	3,693	3,584	10,861
Alternative 4	3,261	1,643	3,286	276	2,027	301	10,795
Alternative 5	3,202	1,613	3,226	336	2,057	360	10,795

11 Source: Staff analysis.
12
13 The largest annual increase in housing demand above the baseline would be anticipated in the
14 years 2001 and 2002 under Alternative 3 (5,939 housing units each year). Under this alternative,
15 there would also be a decrease in housing demand in 2003 and 2004, totaling 4,524 housing units
16 (negative housing demand from years 2003 and 2004 plus baseline housing demand of 1,885 for
17 each year). This increase and subsequent decrease reflects the large amount of temporary
18 housing needed for construction workers required at the six Alternative 3 sites during the
19 anticipated short construction period of three years.
20
21 The baseline projection (No-action Alternative) anticipates an annual increase in housing demand
22 of approximately 1,885 new homes (see Appendix K). Coupled with the estimates identified in
23 Table 4.11-4, the alternative proposals would result in a potential peak demand in one year of
24 approximately 5,111 to 7,824 new homes (Alternative 5 and Alternative 3, respectively). A
25 demand this large would require substantially more housing starts (single family and apartments)
26 than previously experienced in the three-county region. Compared to the peak housing starts in
27 recent years (see Sections 3.11.5.2 and 3.11.5.3), the potential peak housing demand would
28 require more than two to three times the number of additional new housing starts than the highest
29 year experienced for new starts in the three-county region.
30
31 As identified above, approximately 40 percent (4,320) of the new households may qualify for
32 affordable housing. This estimate includes a distribution among the affordable housing
33 categories as follows: 1,620 moderately low-income households, 1,188 low-income households,
34 and 1,512 very low-income households. For purposes of determining affordable housing needs,
35 the income distribution reported in the 1990 census for the three-county region (see Appendix K)
36 is assumed to remain the same. Typically, the further a household is from the median income,
37 the greater the affordable housing assistance required. For example, moderately low-income
38 households may qualify for programs such as down-payment assistance, whereas very low-
39 income households may qualify for subsidized housing.
40

1   The lack of affordable housing is currently—and will continue to be—an issue in the present and
2   projected housing market (personal communication, B. Lavorn, MS HUD, Jackson, MS, and R.
3   LeBeau, EDAW, Atlanta, December 16, 1999). A population increase within the city of Biloxi
4   and the three-county region, including an increase in the number of residents eligible for
5   affordable housing, would place additional demands on the already deficient supply of affordable
6   housing. According to David Staehling, Community Development Director for the city of Biloxi,
7   the city and surrounding areas cannot keep pace with the affordable housing demand of current
8   residents. However, this problem is not uncommon and is reflected in national trends that
9   indicate the inability of many communities to keep pace with affordable housing demand
10   (personal communication, D. Staehling, Community Development Director, City of Biloxi, and
11   A. Batstone, EDAW, Orlando, November 30, 1999).
12
13   *4.11.5.2   No-Action Alternative*
14
15   The No-action Alternative assumes that the current Broadwater site would not be developed as
16   proposed. Further development of unknown magnitude could, however, occur on the site. It is
17   anticipated that development on the Broadwater site under the No-action Alternative would have
18   little or no impact on housing demand. As projected by the Mississippi IHL, the city of Biloxi
19   and the three-county region will continue to experience population growth and a corresponding
20   need for additional housing (averaging 1,885 new homes per year between 2001 and 2006). This
21   projection is depicted as the baseline in the Socioeconomic Impacts table in Appendix K. For
22   purposes of this analysis, it is assumed that the local governments of the three-county region have
23   made provisions in their future plans for the baseline growth.
24
25   *4.11.5.3   New Housing Construction Distribution*
26
27   The geographical distribution of the new dwelling units estimated to be needed in the three-
28   county region is based upon projections and methodology described in Appendix K. For
29   Alternatives 2, 3, 4 and 5, these projections predict that 41 percent of the new population on the
30   Gulf Coast would locate in Harrison County, 38 percent in Jackson County, and 20 percent in
31   Hancock County. The distribution of new population in the three-county region is shown in
32   Appendix K.
33
34   The recent annexation of 32 square miles north of the Back Bay provides the opportunity for
35   additional homes to be developed in the city of Biloxi. The annexation of this property will
36   result in this area being zoned for development in the city and for the eventual provision of
37   municipal services (e.g., fire and police, sanity sewer, and potable water). A result is the
38   possibility of increased residential densities and supporting commercial development in the
39   newly annexed area. This may allow a large portion of the projected housing demand from the
40   Proposed Action or its alternatives to be accommodated in the city of Biloxi.
41

1 *4.11.5.4   Housing Market Effects*
2
3 A rapid increase in the demand for housing in the Gulf Coast area, compared to the historic
4 capacity of local homebuilders, would be expected to have several types of impacts on the
5 housing market, consistent with micro-economic theory (Dorfman, 1972). A detailed discussion
6 of this theory and related impacts is presented in Appendix K. In general, there would be three
7 primary impacts as described below.
8
9 **The price effect:** The price of housing rises throughout the Gulf Coast housing market, causing
10 everyone in the housing market to pay more. This is a cost to housing buyers, but a windfall to
11 housing sellers. It also increases the property tax revenues of local government and raises taxes
12 for property owners (if millage rates remain the same).
13
14 **The price response:** Some consumers are unable to pay the higher price for housing. As a
15 result, some number of households are crowded, or must double up, and others "spill over" from
16 the Gulf Coast market, seeking housing in other, more distant, housing markets where prices are
17 lower.
18
19 **The supply response:** In the long run, the increased housing prices in the Gulf Coast market will
20 cause more homebuilders to enter the market. The result is more homes available on the market
21 and at a lower price.
22
23 *4.11.6 Social Issues and Consequences of the Casino Industry and Growth*
24
25 The development of large-scale casino gaming in the three-county ROI and its associated
26 population growth would likely have some negative socioeconomic effects. Quantifying
27 negative effects is difficult because quantitative information is either unavailable or not
28 applicable for this EIS analysis. Therefore, the discussion of the negative socioeconomic effects
29 of casino gaming remains qualitative.
30
31 In general, negative impacts can be associated with the additional population growth that
32 accompanies a new or expanding industry. These impacts may include higher crime rates,
33 additional public expenditures, decreases in quality of life, and a phenomenon known as the
34 "substitution effect." The "substitution effect" involves a shifting of expenditures by local
35 residents and tourists away from existing businesses to the new business and its related
36 businesses (casinos, in this instance). The substitution effect may be large if a large proportion of
37 the gambling population is composed of local residents (Gazel, 1998). The substitution effect
38 may be minimal if goods and services produced in the region are being exported outside the
39 region; in other words, an influx of new income occurs, rather than a shifting of expenditures
40 from one business to another.
41
42 A negative socioeconomic impact specific to gambling, including casino gaming, is problem
43 gambling. Problem gambling may lead to loss of work productivity and higher costs for the
44 criminal justice, social work, and family welfare systems. Intangible social costs, such as the
45 productivity losses of employees who are problem gamblers and the emotional strains

1 experienced by families of problem gamblers, are difficult to measure. In addition, problem
2 gambling may not translate into a new social cost, but rather a transfer from an existing cost,
3 such as from alcohol and drug abuse to problem gambling (CBSSE, 1999). Existing research
4 efforts on the benefit-cost analysis of gambling and problem gambling are not sufficiently
5 advanced to allow for a thorough analysis in this EIS. A study in Biloxi and Harrison County
6 was inconclusive about connections between social problems (those studied included bankruptcy,
7 divorce, and suicide) and casino gaming (Nichols, et al., 1998a and 1998b). However, problem
8 gambling would likely affect a small percentage of the population.
9
10 The quality of life in a local area or region may suffer due to the negative effects associated with
11 higher crime rates and problem gambling. Additional decreases in the quality of life may result
12 due to the scale of the development. Examples include 24-hour noise and activity, stressed
13 public services, traffic congestion, and a perception among residents that a local area is being
14 "lost" to tourists.
15
16 Based on available data, the construction and operation of Alternatives 2, 3, 4, and 5 and its
17 associated population increases would likely result in moderate increases in crime, problem
18 gambling, and diminished quality of life in the three-county region. Higher crime rates may
19 result in higher costs for law enforcement and the criminal justice system. However, the cost of
20 law enforcement would not necessarily exceed the costs that would be incurred with the
21 introduction of a different type of industry or other tourist attraction (Arthur Andersen, 1996).
22 Under the No-action Alternative, the possible expansion of the existing Broadwater site would
23 have an impact on crime, problem gambling, and quality of life issues. However, impacts of the
24 No-action Alternative would be smaller compared to the impacts of Alternatives 2, 3, 4, or 5.
25
26 *4.11.7 Impacts on Tourism*
27
28 *4.11.7.1   Alternatives 2, 4, and 5*
29
30 The operation of Alternatives 2, 4, and 5 would add to the continuing transformation of the
31 Mississippi Gulf Coast from a regional casino market to a national casino market. The operation
32 of the alternatives would add to existing casino and non-casino recreational opportunities in the
33 three-county region. Examples of non-casino recreational facilities would include, but are not
34 limited to, the golf course, marina, water and amusement park, and retail and entertainment
35 complexes. For a complete description of proposed program elements under each alternative,
36 refer to Chapter 2.0 and the recreation discussion in Section 4.12. These activities, especially the
37 proposed 475,000 square feet of retail shopping space, would provide a positive impact on
38 tourism-related sales taxes in the three-county region, contributing approximately 7 percent of
39 gross sales to the state of Mississippi, with 1.3 percent of that total diverted to the city of Biloxi.
40 The tax effects of the alternatives are presented in Section 4.11.8. Sales tax revenues account for
41 only part of the total tax effect. The portion of sales tax revenue related to tourism cannot be
42 estimated at this time.
43
44 In 1998, out-of-state visitors to Hancock and Harrison Counties accounted for approximately 70
45 percent of all visitors (Mississippi Gaming Commission, 1999). Although visitors can shift

1 expenditures away from other businesses as described previously (the substitution effect), their
2 expenditures are a new source of revenue rather than a reallocation of local spending. Revenues
3 from outside the region help generate spin-off economic benefits that are captured locally
4 through the multiplier effect (Eadington, 1998).
5
6 *4.11.7.2   Alternative 3*
7
8 The operation of Alternative 3 would add to the continuing transformation of the Mississippi
9 Gulf Coast from a regional casino market to a national casino market. The operation of
10 Alternative 3 would add to existing casino and non-casino recreational opportunities in the three-
11 county region. For a complete description of proposed program elements, refer to Chapter 2.0
12 and the recreation discussion in Section 4.12. Non-casino activities for the Alternative 3 sites
13 would include the same amount of retail space (475,000 square feet) as proposed under
14 Alternatives 2, 4, and 5. The Alternative 3 program does not contain a golf course or water and
15 amusement park due to lack of available space. Retail shopping would provide a positive impact
16 on tourism-related sales taxes in the three-county region (7 percent to the state of Mississippi and
17 1.3 percent to the city of Biloxi). As with Alternatives 2, 4, and 5, the actual amount of sales tax
18 revenue cannot be estimated at this time.
19
20 *4.11.7.3   No-Action Alternative*
21
22 Under the No-action Alternative, the possible expansion of the existing Broadwater site would
23 contribute to the tourism opportunities in the three-county ROI. However, the magnitude of the
24 project and subsequent impacts would be smaller compared to the impacts of Alternatives 2, 3, 4,
25 or 5.
26
27 ***4.11.8 Impacts on Fiscal Environments***
28
29 Tax revenues received from the operation of Alternatives 2, 3, 4, and 5 would have large positive
30 impacts on the tax revenues for the state of Mississippi, Harrison County, and the city of Biloxi.
31 These positive tax revenue impacts would be offset by expenditures for required casino
32 regulation and investment in public services. Types of taxes include ad valorem (property),
33 sales, gaming, hotel room, and entertainment/retail taxes. Types of fees include tidelands lease
34 and gaming unit fees. The total impact on tax revenues for Alternatives 2, 3, 4, and 5 are
35 summarized in Table 4.11-5. Table 4.11-6 shows the annual tax effect for individual state and
36 local governments. Detailed information for individual taxes and fees are shown in Appendix K.
37

1

Table 4.11-5

2

Annual Tax Effect from Operations and Commercial Activity – 2006 to 2010*

3

Operational Output	Direct Effects	Indirect Effects	Induced Effects
Total Tax Effect			
Alternative 2	$221,249,672	$17,518,314	$19,954,232
Alternative 3	$153,106,110	$10,778,152	$12,335,196
Alternative 4	$180,320,670	$13,699,047	$15,627,307
Alternative 5	$179,632,189	$13,699,047	$15,627,307
No-Action Alternative/"Baseline"**	N/A	N/A	N/A

4 N/A = Not Available.

5 *Operations and commercial activity for Alternative 3 would begin two years before (in 2004) the

6 operations of Alternatives 2, 4, and 5 because of a shorter construction period.

7 **The Mississippi Gaming Commission reports gaming revenues on a regional basis, not by individual

8 casino operator; therefore, the total tax effect for the No-action Alternative could not be calculated.

9 Source: DMA and staff analysis, 1999.

10

11

Table 4.11-6

12

Annual Tax Effect by State or Local Government – 2006 to 2010*

13

	County	City	School	State
Alternative 2	$27,435,037	$66,146,670	$11,608,825	$116,059,140
Alternative 3	$23,396,748	$47,490,766	$10,113,114	$72,105,481
Alternative 4	$24,541,236	$54,404,254	$10,438,260	$90,936,920
Alternative 5	$24,320,584	$54,126,230	$10,248,455	$90,936,920
No-Action Alternative/"Baseline"**	N/A	N/A	N/A	N/A

14 N/A = Not Available.

15 *Operations and commercial activity for Alternative 3 would begin two years before (in 2004) the

16 operations of Alternatives 2, 4, and 5 because of a shorter construction period.

17 **The Mississippi Gaming Commission reports gaming revenues on a regional basis, not by individual

18 casino operator, therefore; tax effects for the No-action Alternative could not be calculated.

19 Source: DMA and staff analysis, 1999.

20

21 *4.11.8.1*   *Alternatives 2, 4, and 5*

22

23 The operation of Alternatives 2, 4, and 5 would have a large positive impact on the tax revenues

24 of the state of Mississippi, Harrison County, and the city of Biloxi. Alternative 2 would have the

25 largest total tax effect of the alternatives, generating $205 million in direct, indirect, and induced

26 taxes. Alternatives 4 and 5 would have the same total tax effect, generating $193 million in

27 direct, indirect, and induced taxes (see Table 4.11-6).

28

29 Additional public expenditures for state and local governments include costs due to casino

30 regulation, increased infrastructure capacity (e.g., roads and utilities), and increased public safety

31 and services (e.g., police, fire, and waste management). However, casino-related taxes and fees

32 are already designated for some of these public services. Overall, the cost of infrastructure

1 improvements would not necessarily exceed the costs that are incurred with the introduction of a
2 new industry or other tourist attraction (Arthur Andersen, 1996).
3
4 *4.11.8.2   Alternative 3*
5
6 The operation of Alternative 3 would have a positive impact on the fiscal environment of the
7 state of Mississippi, Harrison County, and city of Biloxi; however, the tax impact of Alternative
8 3 would be the lowest of the alternatives, generating $186 million in direct, indirect, and induced
9 tax effects. Additional public expenditures for state and local governments would include the
10 same types of costs mentioned above for Alternatives 2, 4, and 5. Public expenditures for
11 Alternative 3 would be similar to public expenditures for Alternatives 2, 4, or 5.
12
13 *4.11.8.3   No-Action Alternative*
14
15 Under the No-action Alternative, the possible expansion of the existing Broadwater site would
16 affect state and local tax revenues. However, the magnitude of the project and subsequent
17 impacts would be less than the impacts of Alternatives 2, 3, 4, or 5.
18
19 **4.11.9 Mitigation**
20
21 The housing market effects described in Section 4.11.5.4 and Appendix K occur in many
22 markets, accompanying the arrival of a large employer such as a major industry or institution.
23 These effects, which include increased housing costs, are also common in popular tourist
24 markets. Several mitigation strategies are possible, the most effective of which is to distribute
25 the arrival of new employees as gradually as possible over time. Strategies include:
26
27 •   Providing relocation assistance for incoming families in the form of monetary subsidies or
28   reduced market loans, along with company-provided real estate market guidance.
29
30 •   Providing temporary relocation housing on-site for new employees.
31
32 •   Requiring housing linkage programs similar to those enacted in cities such as Key West,
33   Florida and San Francisco, California. These programs require major new employers to
34   develop new off-site housing in the community at the same pace with which they open non-
35   residential portions of their real estate development projects and at a price range
36   commensurate with the salaries of their new employees.
37
38 •   Encouraging local governments and non-profit organizations to evaluate their affordable
39   housing programs and seek additional federal and state support where needed to
40   accommodate housing assistance needs.